

Refraction Lab

p45-46 in labbook

don't write it up like two labs, just have p45 as part 1 and p46 as part 2

purpose:

Hypothesis: Snell's law,
n water is 1.33

procedure: "refer to labbook p45,46"

change: make a graph of $\sin\theta_{\text{air}}$ on the y axis and $\sin\theta_{\text{water}}$ on x axis -get equation
use a spreadsheet

data tables:

part 1 air to water

angle of incidence $\theta_i (^{\circ})$	angle of refraction/ reflection $\theta_r (^{\circ})$	$\sin\theta_i$ (no units) air	$\sin\theta_r$ (no units) water	notes

0.0				
10.0				
20.0				

keep going to 90° , note the largest angle that you get refraction

part 2 water to air

angle of incidence $\theta_i (^\circ)$	angle of refraction/ reflection $\theta_r (^\circ)$	$\sin\theta_i$ (no units) water	$\sin\theta_r$ (no units) air	notes
0				
10				
20				

keep going to 90° , note the largest angle that you get refraction